



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST-NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,178	03/24/2000	Hiroshi Utsunomiya	61049	1969
530 7590 05/25/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER HOYE, MICHAEL W	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 05/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/534,178	Applicant(s) UTSUNOMIYA ET AL.	
	Examiner Michael W. Hoyer	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicants' arguments filed on February 23, 2007 have been fully considered but they are not persuasive.

Regarding independent claim 1, the Applicants argue on page 3 that, "[the] applied combination of references does not appear to specifically disclose "information generating means for generating a digital information signal containing information **identifying a type of only said transmitting apparatus...**" and "a multiplexing circuit **for multiplexing the digital information signal and** the digital audio and/or video signal" as in claim 1."

More specifically, the Applicants argue on page 3 that:

...the Examiner appears to rely on portions of Goldschmidt Iki for disclosing the information generating means of claim 1. Although Fig. 4 of Goldschmidt Iki appears to illustrate an electronic program guide, such guide illustrates information for a plurality of programs. As such, and unlike the information generating means of claim 1, Goldschmidt Iki as applied by the Examiner does not disclose "information generating means for generating a digital information signal containing information identifying a type of **only** said transmitting apparatus."

In response the Examiner respectfully disagrees with the Applicants because the Goldschmidt Iki reference teaches that the transmitting apparatuses or sources provide signals indicating the type of the transmitting apparatus or source (i.e. video recorder/playback device, digital video disk (DVD), compact disk (CD), etc.) and the signal format of the audio and/or video signal, which are unique to the specific transmitting apparatus or source, where the information is sent to system controller 104 (Fig. 1)/system controller 200 (Fig. 2) and the

Art Unit: 2623

information is processed for output on a display device as an EPG as seen in Fig. 4, which shows a source identifier 402, a transport medium / format at 404 and alternatively an audio format at 406. The system 100 contains various devices such as television display device 102, CD player 112, etc for transmitting/receiving analog and digital data (col. 3:5-43 & col. 4:36-54) and forming a display signal for television/display device 102. Video characteristics are stored including indicators of signal format from various inputs (Fig. 4, items 404, 406, see col. 7, line 40 – col. 8, line 7). In addition, in one implementation, all the characteristics for each version or source may be displayed, such as the predetermined characters including “ANALOG BROADCAST”, “DIGITAL CABLE”, “DVD”, “STEREO”, “DOLBY PRO LOGIC” and “THX; DOLBY AC3”, as shown in the EPG table of Fig. 4, which describe the type of audio and/or video source or signal transmitting apparatus (i.e. “DVD”) and the format type of the output video signal (i.e. “ANALOG” or “DIGITAL”), which is generated and provided from each transmitting apparatus or source as described above (see col. 6, line 66 – col. 7, line 11 and col. 7, line 29 – col. 8, line 3).

In addition, the Applicants argue on pages 3-4 that, “the Goldschmidt Iki/Chernock multiplexed signal would not be formed from a digital information signal which may identify “a type of only said transmitting apparatus.”

In response, the Examiner respectfully disagrees with the Applicants because the Goldschmidt Iki reference discloses receiving signals from various sources including information on the source identity and the type of signal/medium used by the source (i.e. analog broadcast, digital broadcast, analog cable, digital cable, satellite, network (the Internet), digital video disk, and analog video cassette) (see col. col. 6, line 66 – col. 7, line 11 and col. 7, line 29 – col. 8, line

Art Unit: 2623

3, as described above and in the rejection below). The Goldschmidt Iki et al reference does not explicitly disclose multiplexing the digital information signal onto a digital source signal, and separating out (or demultiplexing) the digital information signal from the digital audio and/or video signal. However, it is well known in the art of interactive video distribution systems that digital information signal(s) and digital source signal(s) may be multiplexed onto a digital source signal for transmission to a receiver where the signals are demultiplexed and processed accordingly, as disclosed and taught by the Chernock et al reference in col. 4, lines 41-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time on the invention to have combined the teachings of the Goldschmidt Iki et al reference with the Chernock et al reference for the advantage of combining or multiplexing a digital information signal onto a digital source signal in order to reduce the size as save bandwidth with regards to the transmitted signal. One of ordinary skill in the art would have been led to make such a modification since digital multiplexing is well known in the art, especially through the use of the MPEG-2 standard for compression and multiplexing.

The Applicants further argue on page 4 that, “the applied combination of references does not appear to disclose “means for superimposing . . . such that a user can view the type of the audio and/or video signal transmitting apparatus . . . pertaining to only the display video signal currently being displayed at the time the display video signal is displayed,” as recited in claim 1.” More specifically, the Applicants argue that, “Goldschmidt Iki does not disclose the present means for superimposing”, and “[the] portions of Lownes do not appear to disclose the “type of the audio and/or video signal transmitting apparatus.”

In response, the Examiner respectfully disagrees with the Applicants because Goldschmidt Iki discloses that “a user can view the type of the audio and/or video signal transmitting apparatus” as described in the cited portions above and in the rejection below, where the type of the audio and/or video signal transmitting apparatus may be displayed on the display device in a separate box or window, or by overlaying the current video display with the information, etc (see col. 7, lines 2-11). Goldschmidt Iki is silent as to the claimed “pertaining to only the display video signal currently being displayed at the time the display video signal is displayed.” However, the Lownes et al reference, specifically teaches a status display which includes information on the current video or program being displayed, such as a digital television program, as well as indications of the format being used to display the received signal (see Figs. 3A-3E and col. 8, lines 5-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time on the invention to have combined the teachings of the Goldschmidt Iki et al reference with the additional teachings of the Lownes et al reference for the advantage of providing a display in which only the information pertaining to the video signal currently being displayed is shown, which allows a user to view specific information that is only related to the currently selected audio and/or video transmission. One of ordinary skill in the art would have been led to make such a modification since it is well known in the art of computer monitors/receivers and/or television displays/receivers to provide an on screen display, such as an overlay or superimposed image, that relates to only the information pertaining to the video signal currently being displayed for the advantage given above.

Regarding independent claims 7 and 12, the Applicants make similar arguments as those described above relating to independent claim 1, and the Examiner respectfully disagrees with the Applicants for the same reasons as described above.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldschmidt Iki et al (USPN 6,594,825), in view of Chernock et al (USPN 6,314,569), in further view of Lownes et al. (USPN 6,137,539).

With respect to claims 1, 7, and 12, note the Goldschmidt Iki et al reference which discloses the claimed audio and/or video signal transmitting system with a plurality of audio and/or video signal transmitting apparatuses with a plurality of analog outputs and a plurality of digital input/output means is met as seen in Fig. 1. Although not explicitly shown, it is inherent that transmitters are provided to supply the satellite input 126 and other inputs 124, 128, 134. The transmitting apparatuses or sources provide signals indicating the type of the transmitting apparatus or source (i.e. video recorder/playback device, digital video disk (DVD), compact disk (CD), etc.) and the signal format of the audio and/or video signal, which are unique to the specific transmitting apparatus or source, where the information is sent to system controller 104 (Fig. 1)/system controller 200 (Fig. 2) and the information is processed for output on a display

Art Unit: 2623

device as an EPG as seen in Fig. 4, which shows a source identifier 402, a transport medium / format at 404 and alternatively an audio format at 406. The system 100 contains various devices such as television display device 102, CD player 112, etc for transmitting/receiving analog and digital data (col. 3:5-43 & col. 4:36-54) and forming a display signal for television/display device 102. Video characteristics are stored including indicators of signal format from various inputs (Fig. 4, items 404, 406, see col. 7, line 40 – col. 8, line 7). Controller 200 (which includes controller 208) is operative as means to provide an overlay of these characteristics to facilitate user selection (col. 7:2-11). The Goldschmidt Iki et al. reference also clearly discloses that the type of the audio and/or video signal transmitting apparatus and the format type of the output video signal are indicated by predetermined characters as met by the EPG and program selection controller 208, which may display options in a separate box or window on the display device, overlaying (or superimposing) the current video display with the options, etc (col. 7, lines 2-11). In addition, in one implementation, all the characteristics for each version or source may be displayed, such as the predetermined characters including “ANALOG BROADCAST”, “DIGITAL CABLE”, “DVD”, “STEREO”, “DOLBY PRO LOGIC” and “THX; DOLBY AC3”, as shown in the EPG table of Fig. 4, which describe the type of audio and/or video source or signal transmitting apparatus (i.e. “DVD”) and the format type of the output video signal (i.e. “ANALOG” or “DIGITAL”), which is generated and provided from each transmitting apparatus or source as described above (see col. 6, line 66 – col. 7, line 11 and col. 7, line 29 – col. 8, line 3). The claimed, “...means for superimposing the image signal on the display video signal, so that when displayed the predetermined characters or logo are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus and the

Art Unit: 2623

format type pertaining to only the display video signal currently being displayed at the time the display video signal is displayed”, is met in part by the Goldschmidt Iki et al reference, as described above, where alternate versions may be provided to the user, since col. 7, lines 2-5 states that, “This provision can be in any of a wide variety of manners, such as ... overlaying the current video display with the options,” which meets the claimed, “the predetermined characters are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus...at the time the display video signal is displayed.” Although the Goldschmidt Iki et al reference does not explicitly disclose multiplexing the digital information signal onto a digital source signal, and separating out (or demultiplexing) the digital information signal from the digital audio and/or video signal and then processing that digital information signal to provide an superimposed image signal (or overlay) on the corresponding digital video signal that is being displayed, it is well known in the art of interactive video distribution systems that digital information signal(s) and digital source signal(s) are multiplexed onto a digital source signal for transmission to a receiver where the signals are demultiplexed and processed accordingly, as disclosed and taught by the Chernock et al reference in col. 4, lines 41-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time on the invention to have combined the teachings of the Goldschmidt Iki et al reference with the Chernock et al reference for the advantage of combining or multiplexing a digital information signal onto a digital source signal in order to reduce bandwidth of the transmitted signal. One of ordinary skill in the art would have been led to make such a modification since digital multiplexing is well known in the art, especially through the use of the MPEG-2 standard for compression and multiplexing. In addition, Goldschmidt Iki et al does not explicitly disclose the

Art Unit: 2623

claimed, “means for superimposing the image signal on the display video signal, so that when displayed the predetermined characters or logo are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus and the format type pertaining to **only** the display video signal currently being displayed at the time the display video signal is displayed.” However, the Lownes et al reference specifically teaches a status display which includes information on the current video or program being displayed, such as a digital television program, as well as indications of the format being used to display the received signal (see Figs. 3A-3E and col. 8, lines 5-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time on the invention to have combined the teachings of the Goldschmidt Iki et al and Chernock et al references with the additional teachings of the Lownes et al reference for the advantage of providing a display in which only the information pertaining to the video signal currently being displayed is shown, which allows a user to view specific information that is only related to the currently selected audio and/or video transmission. One of ordinary skill in the art would have been led to make such a modification since it is well known in the art of computer monitors/receivers and/or television displays/receivers to provide an on screen display, such as an overlay or superimposed image, that relates to only the information pertaining to the video signal currently being displayed for the advantage given above.

With respect to claims 2, 8, and 13, the claimed use of a predetermined code in a comparison table is seen with the EPG shown in Fig. 4 as a table and including “codes” as indicators of a signal format such as “analog broadcast,” “digital cable,” “stereo,” “Dolby pro logic,” etc.

With respect to claims 4, 9-10, and 14-16, Goldschmidt Iki does not teach use of a predetermined bit map logo to indicate the format. However, the Chernock et al reference as previously combined with the Goldschmidt Iki et al reference above, further discloses that bitmaps may be used for may text and graphics objects, such as logos, that may be used for on-screen displays (OSD) or used as a graphics overlay with video content (see col. 5, lines 44-55). Therefore, it would have been obvious to one skilled in the art at the time of the invention to have further modified Goldschmidt Iki et al by using bit map logos in order to provider users with a readily understood, aesthetically pleasing display that provides for easy program selection as taught by the Chernock et al reference.

With respect to claim 5, the claimed superimposing at the receiving side is met as noted above in response to claim 1. Furthermore, the claimed window synthesizing using a plurality of windows is met by overlaying characteristics and use of separate windows on a display (col. 7:2-11).

With respect to claims 6, 11, and 17, the claimed use of IEEE 1394 formats is met by use of an IEEE 1394 bus and standards as taught in col. 3:38-43.

With respect to claim 16, the claimed window synthesizing using a plurality of windows is met by overlaying characteristics and use of separate windows on a display (col. 7:2-11). Goldschmidt Iki does not teach superimposing for each signal the format at the transmitting side. However, the Lownes et al reference, as combined with Goldschmidt Iki above, clearly teaches this limitation as previously described above in claim 1.

Conclusion

Art Unit: 2623

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Art Unit: 2623

Except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

Or faxed to: 571-273-8300

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer
May 16, 2007


ANDREW Y. KOENIG
PRIMARY PATENT EXAMINER